TM-7115
LCD / Touch Monitor
User's Manual

Rev. Original

I. FEATURES

- Most stable touch monitor for industrial and commercial use
- Application covers POS, Factory Automation etc.
- High quality 15" TFT LCD panel with scaling function for full screen display
- Spill proof and easy maintenance structure allowing easy cleaning
- Tilt adjustable yet robust and wobble free construction
- Recommended LCD resolution: 1024 x 768
- Resistive type extra long life touch panel in USB interface (resistive type) or RS232 interface (IR type) touch panel function including left/right button, double click, drag & drop
- Touch beep can be pitch adjusted/enabled/disabled by software control for USB touch model
- Connect to host through VGA port plus USB port (for all models) and/or COM port (for IR touch model only)

FCC NOTICE

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with limits for a Class A digital device pursuant to subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures to correct the interference.

WARRANTY LIMITS

Warranty will terminate automatically when the machine is opened by any person other than the authorized technicians. The user should consult his/her dealer for the problem happened. Warranty voids if the user does not follow the instructions in application of this merchandise. The manufacturer is by no means responsible for any damage or hazard caused by improper application.

ABOUT THIS MANUAL

This manual assists the user to utilize the Touch Monitor TM-7115. This product provides exquisite touch control capability over a stable and adjustable LCD monitor with minimal footprint.

The manufacturer of the TM-7115 touch monitor heartily apologizes to the user for reserving the right to change or to modify this manual without notice due to the rapid and constant progress and improvement on science and technology. The user may always obtain the most up to date information through any of our web sites: http://www.posiflex.com, http://www.posiflex.com.tw, http://www.posiflexusa.com.

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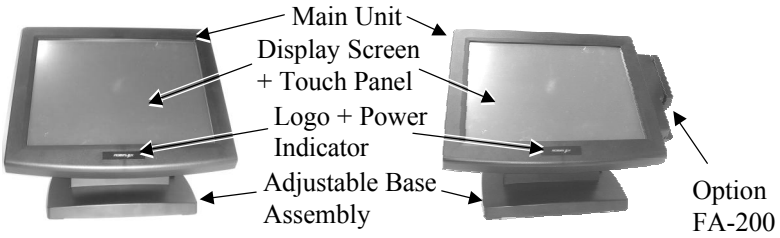
II. CARTON CONTENTS

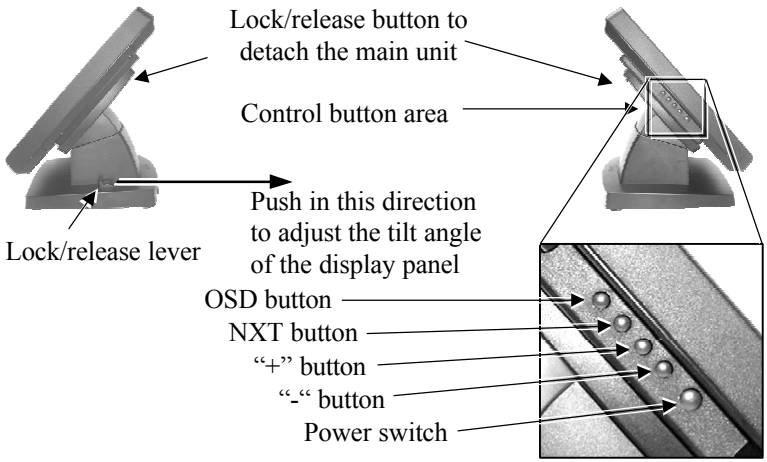
1. Touch Monitor (Main unit + Adjustable base stand assembly)
2. User's Manual
3. VGA cable: 21863236610
4. USB cable: 21863250800
5. Power adaptor: 12 V DC 21973212240 & power cord
6. Posiflex Product Information CDROM
7. Option RS232 cable: 21863244210
8. Option Audio cable: 21863041510

III. PARTS IDENTIFICATION

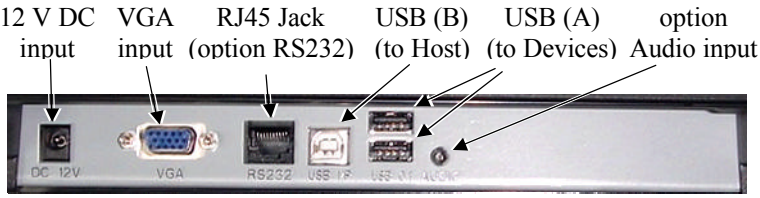
A. FRONT VIEW



B. SIDE VIEWS



IV. INPUT / OUTPUT PORTS



V. AVAILABLE OPTION ITEMS

1. Audio port for multimedia application
2. Side mount upgrade kit FA-200 with MSR / Fingerprint sensor
3. Wall mount kit (WB-6000V-B)

VI. HARDWARE INSTALLATION

A. Option Multi-Media Function

When this option is ordered with the TM-7115 touch monitor, the 3.5 mm diameter stereo jack and 2 internal 2W speakers with amplifiers are already installed. This option cannot be late installed if it is not included in the original order.

B. Option Side Mount Upgrade Kit

When a side-mount upgrade kit option such as FA-200 is ordered with the TM-7115 monitor, this option is already installed in the delivery. No matter the kit itself contains MSR only, finger print sensor only or both options, the connection to the TM-7115 monitor is through an internal cable in right side cover of the LCD/touch unit. Remove the 2 circled screws in the left picture to remove the cover for side mount upgrade kit as viewed from back of the panel.

Take out the cable inside this cover as circled in the left picture here and connect it to connector inside the side mount upgrade kit as arrowed in the same picture. Gently arrange the excessive length of this cable back in the hole and screw-fit it back to the position originally occupied by the cover as in the right picture. Please reserve the cover if there is chance to have the side mount kit removed in the future.

C. Option RS-232 Interface for IR Touch Panel

The RJ45 type modular connector for RS-232 connection to the host system is installed only when this option is ordered with the TM-7115 touch monitor. This option cannot be late installed if it is not included in the original order.

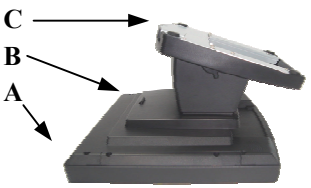
D. Cable Connections

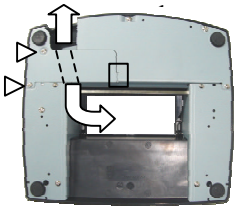
In order to settle the touch monitor properly in a point of sale system, all the cable connections have to be routed through its base. Therefore, please observe the procedures from A to C below to separate the main unit from the base stand assembly after all cables in connection area disconnected.

Step A: Prepare a soft clean flat surface, such as a piece of cloth on the desk to seat the front surface of main unit

Step B: Press the Lock/Release button for main unit detach and meantime ...

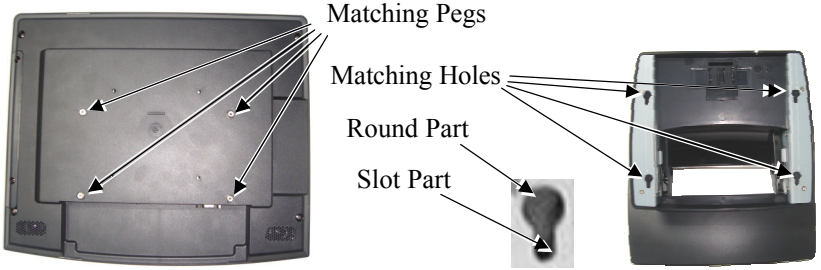
Step C: Slide the base stand assembly to the right to separate the main unit from base





Refer to the bottom view picture of the separated base at left, pass all cable through the dash lined tunnel under a steel plate. Open the steel plate if necessary by removing the 2 triangle marked screws. Insert the rectangular marked end first when reinstalling the steel plate.

Hook the main unit back onto base stand assembly by matching the matching pegs to round part of matching holes and slide them down to slot part till the rear lock/release button clicks.



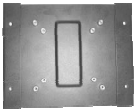
Connect the VGA cable, USB cable (type B connector) and power cable to the I/O connection area of TM-7115. Connect the RJ45 type modular plug of the RS232 cable and the audio cable if the option is included. Connect

up to 2 USB devices to TM-7115 at the type A connectors. Please note that unlike usual USB HUB, these USB devices won't be recognized by the host when TM-7115 is powered off.

E. Option Wall Mount Kit

Select a flat surface on wall of adequate strength and with proper ventilation and space condition. Please use the right material to hold this monitor according to the wall material (Drywall, concrete, solid wood, etc). Consult with your contractor if it is necessary. Please fix WB-6000V-B at the holes inside the guide holes circled in the picture to the wall or fix it to a VESA joint at bosses on back side.

Front Side
WB-6000V-B



Back side
WB-6000V-B

VII. DRIVER INSTALLATION

A. INSTALLATION

1. USB touch

The USB interface touch controller operates as an USB mouse without need for any special driver in Windows. However, there is a program supported for its calibration and touch function manipulation. Please find it in the attached Posiflex product information CD-ROM under subdirectory \Drivers\TM_LM\USB.

For Linux environment, please find the setup program for the suitable kernel in the same directory and install the required driver and calibration program as the setup program proceeds.

2. IR touch panel

Please find in the attached Posiflex product information CDROM under subdirectory \Drivers\TM_LM\RS232 for touch controller driver. In case this subdirectory is not found in the CDROM received, please use identical driver from relevant product such as \Drivers\TP58_TP59\Touch\RS232. In such subdirectory, please then find the proper descendant for the OS applied such as \RSTC_W9x for Win9x system. Click SETUP.EXE to install the driver into system and a utility program for touch calibration. Please select "SmartSet Serial Controller" as the controller type during the installation process. Same approach applies for other operating system.

If, for any reason, the user wants to remove the driver for the RS232 touch controller, please select "Monitor Mouse" in the program list for removal.

B. SETUP/CALIBRATION

1. USB touch

a. USB touch manager

Once the USB control program is installed, the user can utilize it to calibrate the touch screen, define mouse button emulation parameters, enable right button emulation or define the click sound's tone and duration. Please go to "Program Files" and select "Posiflex USB Touch Tools" and then select "Posiflex USB Touch Manager" within the tools to engage this utility. Most items in this utility should be easily understandable to average user. Followings are just some reminders on some items.

- **Calibrate** – This button engages the "Posiflex USB Touch Calibrator".
- **Edge Acceleration** – This function engages the "Posiflex USB Touch Edge Acceleration Tool" and helps to find the hidden taskbar or thin scroll bar through touch.
- **Hide Cursor / Show Cursor** – This button hides or shows the mouse cursor on screen display. Please never hide cursor before the touch is enabled and calibrated.
- **Buzz On** – This check box together with the 2 list buttons below it determines the frequency and duration of the internal buzzer beep as response to touch on touch panel.
- **Touch Point Dots** – This list button selects the size of touch point on touch panel. A too small touch size makes the mouse cursor jumpy or even bouncing. A too large touch size results in unsatisfactory touch accuracy.
- **Reset To Default** – This button resets all touch parameters.
- **Enable PIR** – This check box is not applicable to the monitor. Please keep it unchecked.
- **Enable Touch** – This check box must be checked to have the touch panel working.
- **Touch as Right Button Click** – This check box defines each touch on touch panel as clicking the right button of mouse at that point. When it is unchecked, each touch will work as clicking the left button of mouse. (Ref. to the right hand version of mouse)
- **Mouse Emulation/Click on Touch/Click on Release** – Only one of the three radio buttons can be selected. The mouse emulation refers to the drag and drop function.
- **OK** – This button accepts all parameters set and closes the utility window.
- **Apply** – This button accepts all parameters set and remains in the utility window.

- **Cancel** – This button discards all changes to the parameters and closes the utility window.

b. USB touch calibrator

This program helps re-calibrating the touch position with the USB mouse emulation. Please touch the 3 calibration boxes and a confirmation box that appear sequentially.

c. USB touch edge acceleration tool

Helps to find the hidden taskbar or thin scroll bar through touch

- **Enable ...** – Each check box determines whether or not to engage edge acceleration against which edge of screen.
- **Margin** – This list button selects the range to engage edge acceleration toward the edge before the edge is reached.
- **Compensation** – This list button selects the distance to advance the mouse toward edge from touch point.

d. USB touch right button tool

This tool differs slightly from the "Touch as Right Button Click" check box in the USB touch manager. When executed, there will be a small window of "One Shot Right Button" appearing on desktop. Any touch on the panel right after touching this small window will work like clicking the right button of mouse at that point. However, the next touch will resume the left button of mouse unless the small window is touched again.

2. IR touch

Once the touch controller driver is installed, the user can utilize it to calibrate the touch screen, define mouse button emulation modes, enable right button emulation or define the click sound's tone and duration. Please go to "Control Panel" and select "Elo Touchscreen" to engage this utility. Most items in this utility should be easily understandable to average user. Followings are just some reminders on some items.

- **COM port** – This port selection must match exactly the port touch control interface cable is connected to.
- **Align** – This function engages 3 touch targets at left top, right bottom and right top consecutively for touch calibration.
- **Click on touch** – This selection of touch button disables the double click function of a touch and a left click will be registered at the point where a touch on the screen is made even if the touch is dragged to other spot before release.
- **Click on release** – This selection of touch button disables the double click function of a touch and a left click will be registered at the point where a touch is released from the screen.
- **Drag** – This selection of touch button disables the double click function of a touch and a left click contact signal will be sent to the

host when a touch is made and a left click release signal will be there for touch release.

- **Drag, Double click** – This selection of touch button allows the screen touch to simulate the complete left button of a mouse.
- **Double click size** – This adjustment (10 to 100 pixels) is available only when double click function of the touch is enabled. The larger the size is, the easier it is to take 2 consecutive taps on the touch screen at nearly same spot as double click.
- **Show right-click sticky button** – This function is only applicable in Win98 environment. When this box is checked, there will be a large icon on desktop simulating a mouse. After clicking the right button of the mouse in this icon, next touch on the screen will act like clicking the right button of a mouse. After this touch, it will automatically resume the left click function.

C. APPLICATION LIMITATION

With RS232 touch controller driver, certain display mode like full screen display of Windows DOS box should be avoided.

The USB touch is not applicable for OS other than Windows as USB mouse is not supported in DOS environment and there is difficulty in engaging driver to convert the coordination system between the static panel and the dynamic mouse in Linux environment. The USB touch is also not applicable when the monitor is used to be the extended screen in multiple monitor application.

In using the MSR of the side mounted upgrade option for reading a magnetic stripe card, be sure to insert the card to the bottom with magnetic stripe facing the mark aside the slot. The movement of the card can be either inserting the card from the top surface then sliding the card down out of the slot, or sliding the card upward from the lower side of the slot till it reaches the top end as long as the card is a standard one. A non-standard card recorded without complete degaussing prior to recovery may accept only one direction in card reading.

If the fingerprint sensor option is installed in the side mount kit, please find the most comfortable angle for the fingerprint taking operation in consideration of the LCD panel tilt angle and try to align the core of fingerprint in the sensing area.

VIII. LED MODULE INDICATION

- Green: standby
- Blue: power on

When this touch monitor is turned ON, the LED lights in blue. When the

VGA signal vanishes, the monitor shows “No signal” for a while and goes into standby mode and LED is green. However, the touch panel is still operational.

IX. OSD (ON SCREEN DISPLAY) SCREEN ADJUST FUNCTION

A. OSD buttons

The 4 OSD control buttons are above the power switch button on left side of the LCD panel.

“OSD” button: To enter OSD setup menu, or to perform function selected in OSD operation.

“NXT” button: To go to next option function.

“ + ” button: To increase setting value.

“ – ” button: To decrease setting value.

B. OSD functions

Press “OSD” button with a normal display on the screen to activate the OSD functions (On Screen Display adjustment). The OSD window will pop up on the screen. On top part of this window is a Posiflex logo with the OSD firmware version indicated to its lower right. Below this area is a row of icons for main OSD menu. Below the main menu is a group of icons for submenu that corresponds to one icon selected in the main menu. An analysis of the video signal on resolution and refresh rate will be displayed at the bottom. Applicable icons in the main menu and its subsequent menus are explained below.

“**MAIN MENU**”: There are in total 5 icons in this menu: One of the 5 icons will be displayed in inverted color to indicate its relationship with the submenu below. Pressing “NXT” button will shift the selected icon one by one from left to right and then wrap around to the most left. Press “OSD” button to enter the selected sub menu. If there is no button for OSD setting is pressed within a period of time (about 5 seconds to 1 minute as programmed) the OSD window will disappear with all the adjusted parameters saved. Explanations on items in sub menu are as below.

“BRIGHTNESS / CONTRAST ADJUST SUBMENU”: There are 3 icons in this submenu: Press “OSD” button to select item or return to main menu. Press “NXT” button to select among brightness, contrast and exit.

“BRIGHTNESS ADJUST”: When this item is selected, there will be only the brightness icon with an adjustment indication bar under it between the main menu area and the video signal mode. Press “+” button to increase brightness. Press “-” to decrease. Press “OSD” button to save the current setting and return to “Brightness/Contrast submenu”.

"CONTRAST ADJUST": When this item is selected, there will be only the contrast icon with an adjustment indication bar under it between the main menu area and the video signal mode. Press "+" button to increase contrast. Press "-" to decrease. Press "OSD" button to save the current setting and return to "Brightness/Contrast submenu".

"EXIT": Return to "Main menu".

"COLOR ADJUST SUBMENU": There are 4 icons in this submenu: Press "OSD" button to select item or return to main menu. Press "NXT" button to select among auto color adjust, auto RGB reset, Color balance adjust and exit.

"AUTO COLOR ADJUST": Upon an "OSD" button press on this icon the monitor will perform an automatic color adjustment and exits the OSD window leaving 2 icons below at center of the screen. Press "NXT" button to switch the selection. Press "OSD" button to make the choice.

"ACCEPT": Accept the adjustment setting.

"REJECT": Decline the adjustment setting and return to previous setting.

"AUTO RGB RESET": Upon an "OSD" button press on this icon the monitor will perform an automatic RGB reset and exits the OSD window leaving 2 icons below at center of the screen. Press "NXT" button to switch the selection. Press "OSD" button to make the choice.

"ACCEPT": Accept the reset result.

"REJECT": Decline the reset and return to previous setting.

"COLOR BALANCE ADJUST": When this item is selected, there will be 7 icons in this item: between main menu area and the video signal mode. Press "OSD" button to select an item or return to color adjust submenu. Press "NXT" button to select among separate color adjust, 4200K, 5000K, 6500K, 7500K, 9300K and exit.

"SEPARATE COLOR ADJUST": When this item is selected, there will be 3 adjustment indication bars between the main menu area and the video signal mode. Press "NXT" button to select among the 3 colors Red, Green and Blue respectively. Press "+" button to intensify that color. Press "-" to reduce. Press "OSD" button to save the current setting and return to "Color balance adjust submenu".

"4200K": Pressing "OSD" button on this icon will set the color balance to a color temperature of 4200 degrees Kelvin.

"5000K": Pressing "OSD" button on this icon will set the

color balance to a color temperature of 5000 degrees Kelvin.

"6500K": Pressing "OSD" button on this icon will set the color balance to a color temperature of 6500 degrees Kelvin.

"7500K": Pressing "OSD" button on this icon will set the color balance to a color temperature of 7500 degrees Kelvin.

"9300K": Pressing "OSD" button on this icon will set the color balance to a color temperature of 9300 degrees Kelvin.

"EXIT": Return to "Color adjust submenu".

"EXIT": Return to "Main menu".

"GEOMETRY ADJUST SUBMENU": There are 6 icons in this submenu: Press "OSD" button to select item or return to main menu. Press "NXT" button to select among auto geometry adjust, horizontal size, phase, horizontal position, vertical position and exit.

"AUTO GEOMETRY ADJUST": Upon an "OSD" button press on this icon the monitor will perform an automatic geometry adjustment and exits the OSD window leaving 2 icons below at center of the screen. Press "NXT" button to switch the selection. Press "OSD" button to make the choice.

"ACCEPT": Accept the adjustment setting.

"REJECT": Decline the adjustment setting and return to previous setting.

"HORIZONTAL SIZE": When this item is selected, there will be only the horizontal size icon with an adjustment indication bar under it between the main menu area and the video signal mode. Press "+" button to increase horizontal size. Press "-" to decrease. Press "OSD" button to save the current setting and return to "Geometry adjust submenu".

"PHASE": When this item is selected, there will be only the phase adjust icon with an adjustment indication bar under it between the main menu area and the video signal mode. Press "+" or "-" button to adjust the pixel synchronization phase for best picture display. Press "OSD" button to save the current setting and return to "Geometry adjust submenu".

"HORIZONTAL POSITION": When this item is selected, there will be only the horizontal position icon with an adjustment indication bar under it between the main menu area and the video signal mode. Press "+" or "-" button to shift the screen display to right or left. Press "OSD" button to save the current setting and return to "Geometry adjust submenu".

"VERTICAL POSITION": When this item is selected, there will be only the vertical position icon with an adjustment indication bar

under it between the main menu area and the video signal mode. Press "+" button to shift up the screen display. Press "-" to shift down. Press "OSD" button to save the current setting and return to "Geometry adjust submenu".

"EXIT": Return to "Main menu".

"TOOLS SUBMENU": When this item is selected, there are 5 icons in this submenu: Press "OSD" button to select item or return to main menu. Press "NXT" button to select among OSD submenu, reset to default, phase, smoothness / sharpness adjust, mode select and exit.

"OSD SUBMENU": When this item is selected, there are 4 icons in this submenu: Press "OSD" button to select item or return to main menu. Press "NXT" button to select among OSD time, OSD horizontal position, OSD vertical position and exit.

"OSD TIME": When this item is selected, there will be only the OSD time icon with an adjustment indication bar under it between the main menu area and the video signal mode. Press "+" or "-" button to adjust the waiting time for OSD operation before OSD termination between 5 to 60 seconds. Default is 30 seconds. Press "OSD" button to save the current setting and return to "OSD submenu".

"OSD HORIZONTAL POSITION": When this item is selected, there will be only the vertical position icon with an adjustment indication bar under it between the main menu area and the video signal mode. Press "+" button to shift OSD window right. Press "-" to shift left. Press "OSD" button to save the current setting and return to "OSD submenu".

"OSD VERTICAL POSITION": When this item is selected, there will be only the vertical position icon with an adjustment indication bar under it between the main menu area and the video signal mode. Press "+" button to move OSD window downward. Press "-" to go upward. Press "OSD" button to save the current setting and return to "OSD submenu".

"EXIT": Return to "Tools submenu".

"RESET TO DEFAULT": Pressing "OSD" button on this icon will set all parameters back to the status when the monitor left factory.

"SMOOTHNESS / SHARPNESS ADJUST": When this item is selected, there will be only the smoothness / sharpness adjust icon with an adjustment indication bar under it between the main menu area and the video signal mode. Press "+" button to increase smoothness of display (decrease sharpness). Press "-" to go the other way. Press "OSD" button to save the current setting and return to "OSD submenu".

"MODE SELECT": Pressing "OSD" button on this icon will

have no effect at all if the display mode is not one of the confusing modes. The confusing modes here mean 640 x 400 or 720 x 400 in display resolution as both mode have refresh rate of 70Hz, horizontal frequency of 37.9KHz and pixel frequency of 31.5MHz making it impossible for automatic select. These modes are not used in normal Windows display.

"EXIT": Return to "Main menu".

"EXIT": Exit OSD setup with all adjustment saved.

X. SUPPORTED DISPLAY MODES

For video signals beyond the supported display modes, there will be a message "Out Of Range" on middle of screen. Maximum supported color depth is 18 bits or 262,144 colors. Supported display modes are as in the table:

Display Resolution	Refresh Rate (Hz)	Horizontal Frequency (KHz)
640*400	70	31.5
640*480	60	31.5
	72	37.9
	75	37.5
720*400	70	31.5
800*600	56	35.1
	60	37.9
	72	48.1
	75	46.9
1024*768	60	48.4
	70	56.5
	75	60

XI. TROUBLE SHOOTING

In case of any malfunction, please check the following points in sequence to resolve it.

1. If there is no power indication, please check the power connection.
2. If there is no picture display with power LED on, please check the video signal connection.
3. If there is no touch function, please check the connection of the USB cable (21863250800) for USB interface touch controller or the connection of the RS232 cable (21863244210) for RS232 interface touch controller. Please pay particular attention on whether the RS232 cable is connected to the right COM port of host system according to the driver installation.

POSIFLEX

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警告使用者

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。